

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on May 8, 2003, and the references cited therewith.

Claims 27-30 are added; as a result, claims 1-30 are now pending in this application. No new matter is added.

§102 Rejection of the Claims

Claims 1, 3, 5, 8-10, 13-16 and 18-24 were rejected under 35 USC § 102(b) as being anticipated by Collins et al. (U.S. 6,018,125). Applicant respectfully traverses. Collins describes an EMI shield that includes a plastic core having a conductive (e.g., metal) coating (column 2 line 60) such as nickel over copper (column 4 lines 11-17). This is conductive and reflective, not absorbing. In contrast the present invention describes and claims "An electromagnetic interference (EMI) shield comprising: a waveguide body including an array of waveguide cells each having a contiguous inner surface; and an absorber layer covering at least a portion of each contiguous inner surface and capable of absorbing electromagnetic radiation over a select frequency range." This is not described nor obvious from the cited reference. Accordingly, claims 1, 3, 5, 8-10, 13-16 and 18-24 appear to be in condition for allowance, and reconsideration and withdrawal of the rejection is respectfully requested.

§103 Rejection of the Claims

Claims 2 and 12 were rejected under 35 USC § 103(a) as being unpatentable over Collins et al. in view of Mitchell (U.S. 6,426,459). Applicant respectfully traverses. As discussed above, Collins describes a conductive coating on a perforated insulating substrate to form waveguide attenuating holes, not an absorber layer coating. Mitchell describes an EMI shielded vent having an electrically conductive porous shielding member (Col 3 lines 9-15) such as cellular aluminum or metal honeycomb (Col 3 line 36-37). There is no mention in Mitchell of waveguide structures or designs. There is no mention in Collins of a need to improve ventilation beyond the circular holes described. Thus, there is no motivation to combine as proposed by the Examiner. Further,

any combination does not provide an absorber layer on an insulating substrate or frame to form waveguide openings. Accordingly, claims 2 and 12 appear to be in condition for allowance, and reconsideration and withdrawal of the rejection is respectfully requested.

Claims 4, 6, 7, 17 and 25-26 were rejected under 35 USC § 103(a) as being unpatentable over Collins et al. Applicant respectfully traverses. The Examiner asserts, without further support that the shape of waveguide, absorber layer thickness, and resistivity would have been obvious design considerations. Applicant respectfully traverses each of these assertions, and respectively requests under MPEP 2144.03 that the Examiner cite a reference in support of each of his positions. Further, based on the Examiner's citing these references to conductive (metal or metal-coated) vents, the claimed invention's choice of a range resistivity cannot be considered obvious. Further, each of these claims depends from an independent claim that, for the reasons discussed above appears to be in condition for allowance. Accordingly, claims 4, 6, 7, 17 and 25-26 appear to be in condition for allowance, and reconsideration and withdrawal of the rejection is respectfully requested.

Claim 11 was rejected under 35 USC § 103(a) as being unpatentable over Collins et al. in view of Narang et al. (U.S. 5,976,666). Applicant respectfully traverses. Narang discusses (but has no drawings) a perforated absorber layer, but only as laminated to a metal (i.e., conductive) plate, not an insulating vented substrate. Further, although the perforations (e.g., col 12 lines 34-49) and plate (col 12 lines 5058) are described somewhat (without Figures), Applicant cannot find a description that indicates the metal plate itself is perforated, or vented, or allowing flow of heat. Thus, there appears to be no motivation to combine, as suggested by the Examiner, an absorbing layer stripped off a metal plate from Narang, and instead applied to an insulating grid instead of the metal layer described by Collins. Further, claim 11 depends from independent claim 1 that, for the reasons discussed above appears to be in condition for allowance. Accordingly, claim 11 appears to be in condition for allowance, and reconsideration and withdrawal of the rejection is respectfully requested.

New means-plus-function claims 27-30 are added to more fully describe the claimed invention. Claims 27-29 are supported by claims 1, 11, and 7, and claim 30 by Figure 7. Consideration of these claims under 35 U.S.C. 112 paragraph 6 is respectfully requested.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612-³⁷³⁻⁶⁸⁴⁹~~349-9592~~) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

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By their Representatives,

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8 July 2003

By

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 8th day of July, 2003.

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Name

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